ABSTRACT OF THE DISCLOSURE

An object of this invention is to eliminate the need for any analytic function and maximize the contrast of an image after gray level conversion. To 5 accomplish this, an image processing apparatus which executes image processing for a radiographical image obtained by converting, into an electrical signal, an intensity distribution of radiation that is radiated to an object and has passed through at least the object, 10 includes a defining unit for defining a gray level conversion curve to be used for gray level conversion on the basis of the contrast of the image after gray level conversion of the radiographical image, and a gray level conversion unit for converting the gray 15 level of the radiographical image by using the gray level conversion curve defined by the defining unit.